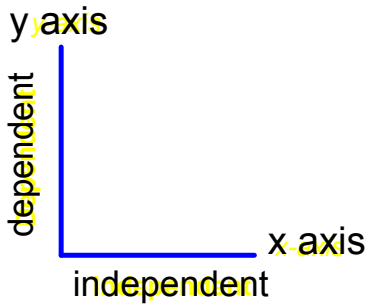
Graphing Velocity

Distance - Time Graphs:

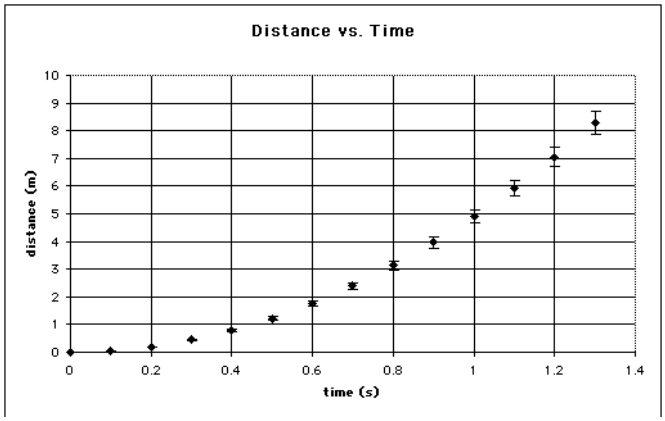
- Helps us to understand the relationship between two variables.

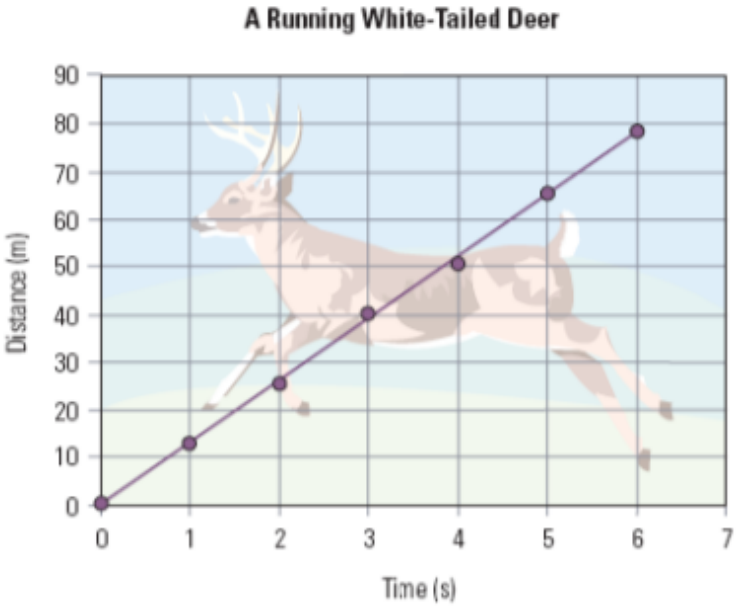
- We can see whether the dependent variable increases or decreases with the independent variable.



  - Most often:
    - Time is independent
    - Distance is dependent
  - "the distance depends on the amount of time"

  - Example:





$V = \frac{\Delta \text{ distance}}{\Delta \text{ time}}$

Δ = Delta or Change in

- OR -

SLOPE! $m = \frac{y_2 - y_1}{x_2 - x_1}$

We Can find the speed from a graph

How to Make a Distance-Time Graph:

Example: The following table shows the travels of a GM, Hummer while it travels down a road to look at the Fall leaves. Graph the speed of the hummer.

Table 3 A Hummer Travelling on a Country Road

Time (min)	Distance (km)
0	0
1.0	1.0
2.0	1.8
3.0	2.9
4.0	4.2
5.0	5.0
6.0	5.9
7.0	6.9
8.0	8.2
9.0	9.2
10.0	10.0